

## CLAIMS

### What is claimed is:

1. A compensation device of radio frequency ripple signal, comprising:
  - 5 a radio frequency ripple signal process circuit for generating the radio frequency ripple signal;
  - a radio frequency signal process circuit for generating a radio frequency signal;
  - a radio frequency signal peak detector, which is coupled to the output of the radio frequency signal process circuit thereby generating a radio frequency signal peak envelope;
  - 10 a first analog to digital converter, which is coupled to the radio frequency ripple signal process circuit for converting the radio frequency ripple signal;
  - a second analog to digital converter, which is coupled to the radio frequency signal peak detector for converting the radio frequency signal peak envelope;
  - a defect detector, which is coupled to the first analog to digital converter and the  
15 second analog to digital converter;
  - a fingerprint detector, which is coupled to the first analog to digital converter and the second analog to digital converter; and
  - an initialization controller, which is coupled to the defect detector, the fingerprint detector, the first analog to digital converter and the second analog to digital converter.
- 20 2. The compensation device of claim 1, wherein the radio frequency ripple signal is uncompensated.
3. The compensation device of claim 1, wherein the defect detector and the fingerprint

detector are implemented by analog circuit or digital circuit.

4. The compensation device of claim 1, wherein when the defect detector detects defects on the optical disk, level of a defect flag is changed from low to high.
5. The compensation device of claim 1, wherein when the fingerprint detector detects fingerprints or dirt on the optical disk, level of a fingerprint flag is changed from low to high.
6. The compensation device of claim 1, wherein the defect flag from the defect detector and the fingerprint flag from the fingerprint are delivered to the initialization controller such that the initialization controller controls the entire process.